



## General

### Guideline Title

American Thyroid Association statement on the essential elements of interdisciplinary communication of perioperative information for patients undergoing thyroid cancer surgery.

### Bibliographic Source(s)

Carty SE, Doherty GM, Inabnet WB 3rd, Pasioka JL, Randolph GW, Shaha AR, Terris DJ, Tufano RP, Tuttle RM, Surgical Affairs Committee of The American Thyroid Association. American Thyroid Association statement on the essential elements of interdisciplinary communication of perioperative information for patients undergoing thyroid cancer surgery. *Thyroid*. 2012 Apr;22(4):395-9. [13 references]  
[PubMed](#)

### Guideline Status

This is the current release of the guideline.

## Recommendations

### Major Recommendations

#### Essential Elements of Interdisciplinary Communication

From a clinical perspective, data that need to be communicated among the disease management team members are acquired in three distinct settings: preoperative evaluations, intraoperative findings, and postoperative data, events, and plans. A wide variety of findings from clinical examination, biochemical testing, cross-sectional and functional imaging tests, and other sources can have a major impact on postoperative risk assessment and therefore may significantly influence decision-making with regard to the role of adjuvant radioiodine ablation therapy (RAI), degree of thyrotropin (TSH) suppression, and extent and frequency of follow-up evaluations. Potentially important *preoperative* findings that may influence postoperative management include:

- High-risk physical examination findings such as a palpable cervical lymph node, a cervical or upper thoracic scar, fixation or other evidence of gross extrathyroidal extension, hoarseness, stridor, morbid obesity, and dermal metastasis
- High-risk historical features such as prior neck irradiation, unexplained bone pain, suspicion of distant or central nervous system metastasis, current or prior hyperparathyroidism, multiple endocrine neoplasia type 2b, prior difficult intubation, and chronic vitamin D deficiency or other clinical issues that might predispose to postoperative hypocalcemic paresthesias
- Preoperative ultrasound findings with regard to both the thyroid gland and cervical lymph node evaluation
- Preoperative chest radiograph findings, if performed
- Preoperative laryngoscopy findings, if performed
- Known or suspected sites of metastatic disease detected on preoperative imaging

- Performance of any imaging studies using iodinated contrast within the previous 6 months
- Comorbid conditions, including pregnancy, that could influence decisions regarding TSH suppression, thyroid hormone withdrawal, or use of RAI
- Abnormal laboratory values that could influence RAI decision-making such as alterations in renal function or in the complete blood count and differential

Similarly, several kinds of *intraoperative* information are critical to the risk stratified postoperative management approach. These include:

- Extent of thyroid surgery
- Description of gross extrathyroidal extension
- Completeness of surgical resection (R0, R1, or gross residual disease)
- Details of suspected residual gross or microscopic thyroid tissue
- Extent of lymph node dissection
- Recurrent laryngeal nerve issues
- Parathyroid gland issues

Finally, a number of *postoperative* findings are also critical to an individualized management approach, including:

- Postoperative hypocalcemia, hypoparathyroidism, vitamin D use, and details of treatment
- Postoperative vocal cord dysfunction
- Other operative complications (such as chyle leak, spinal accessory nerve dysfunction, Horner's syndrome, motor weakness of the arm/shoulder, diaphragmatic paralysis, marginal mandibular nerve deficit) along with the management plan for those complications
- Final pathology report, which optimally should include details supporting extent of thyroidectomy, presence of cancer multifocality, etc.
- Replacement therapy and its timing (levothyroxine, cytomel, calcium)
- Use of iodinated contrast computed tomography in the postoperative period
- Anticipated after-care plan

### Operative Reporting of Thyroidectomy

In addition to documenting the anatomic findings and the surgical care provided during thyroidectomy, the operative report is a tremendously useful communication tool. It should accurately describe the particular thyroid resection using language or data coding that makes the anatomy and the extent of resection clear, along with information sufficient to identify the patient, support the diagnosis and treatment, and promote continuing care. The suggested essential elements are presented here; there are two main methods to convey the variables, necessary data, and anatomy. The traditional way is a surgeon-dictated narrative, while synoptic reporting has more recently come into vogue.

The initial section of a thyroidectomy report should succinctly list the patient's name, medical record number, date of surgery, preoperative diagnosis, postoperative diagnosis, type(s) of anesthetic and any major anesthetic issues that occurred, and names of the surgeon, first assistant, and other surgical participants. The specific indications for thyroidectomy are stated along with the pertinent history and test results and documentation of informed consent. The name of the operation should be clearly stated using precise language, e.g., left thyroid lobectomy and isthmusectomy, total thyroidectomy with right superior parathyroid autotransplantation, reoperative bilateral thyroidectomy. In two-stage thyroid surgery, reoperative resection of a contralateral lobe is generally termed completion total thyroidectomy with designation of the side removed. A surgical time-out may be described.

For the nonsurgeon readers of a thyroidectomy report, the American Thyroid Association (ATA) Surgical Affairs Committee also recommends use of a synopsis, which is usually placed near the top of the report to describe the pertinent findings as concisely and directly as possible. Information should be recorded promptly because when dictation is delayed beyond 24 hours, operative reports are more likely to contain deficiencies. For narrative reporting, although there is some evidence that attending surgeons may be better equipped to dictate complex operations, it is also clear that teaching and mentorship during residency demonstrably improves this skill.

Next, a *dictated narrative* should briefly describe incision placement, the approach to reach the lobe or gland, any notable detail on the size, shape, extent, and/or consistency of each exposed thyroid lobe, and any intraoperative decisions that were required. The report should clearly indicate if bilateral dissection was performed. The report details should accurately describe the thyroid operation that is named in the operative report. Description should include any identified local invasion, substernal extent, surrounding fibrosis, unusual vascularity, unexpected anatomy, and other notable features, for example, kyphoscoliosis, anomalous right subclavian artery, ectopic thyroid tissue, a long or bifid pyramidal lobe, thyroglossal duct cyst, adherent lymph node, or a nonrecurrent laryngeal nerve. In reoperation, the extent of the thyroid gland, its size and/or shape, and the encountered scar tissue may also be documented. If thyroid tissue is intentionally or unavoidably left behind, the reason, location and an estimated weight or size should be stated. The narrative should describe the identified parathyroid glands, as well as the conduct of

parathyroid autotransplantation if required. Identification of the recurrent laryngeal nerve and its branching anatomy is often described, and any unusual or aberrant recurrent laryngeal nerve anatomy is carefully described. The identity and disposition of each resected specimen(s) is clearly given for correlation with the pathology report. The central compartment (level VI) lymph nodes may be described along with specific details of compartment-oriented (central or lateral) nodal resection, if performed. The use and/or results of ancillary procedures are described such as local or regional anesthetic injection, frozen section analysis, or intraoperative parathyroid hormone monitoring. If the technique is used, comment on recurrent laryngeal nerve monitoring should be given. Strict brevity is best for descriptions of hemostasis, drain use, closure, dressings, estimated blood loss, and sponge/needle counts. The narrative should conclude with a description of the patient's condition and immediate disposition. Some surgeons also include a hand-drawn sketch or illustration of the operative findings. An example of a short informative narrative report for initial total thyroidectomy is given in Appendix A of the original guideline document.

The dictated operative report may be supplemented by an electronic dataset, or a *synoptic operative report* generated by use of a computer program may supplant it entirely. Synoptic reports are designed to prompt the surgeon to list specific types of operative information in a series of data-populated fields. A web-based synoptic operative report (WebSMR©) for cancer-specific sites including thyroid was recently developed in the province of Alberta, Canada; reports are created through a combination of drop-down menus, yes/no fields, and comment boxes to produce a concise readable note that can be adapted to meet both institutional and individual surgeon needs. The thyroid WebSMR was developed to include prognostic indicators allowing for calculation of the initial stage by MACIS score, including specific anatomic details such as nerve and parathyroid gland status. Immediacy and cost-savings in transcription have made the thyroid WebSMR report a provincial standard in Canada, where in the future it is planned to be synced with the synoptic pathology report to provide a concise clinical document for risk stratification. An independently designed synoptic thyroidectomy report has also been developed by Memorial Sloan Kettering Cancer Center; it offers particular importance as a research tool and is reported to facilitate systematic documentation based on the concept that thyroid surgery involves a well-defined number of maneuvers or steps required to complete the procedure. When possible, the ATA Surgical Affairs Committee recommends use of a synoptic operative report because it not only offers streamlined ease of use but also proffers the dual advantages of standardized data reporting and adaptability for the needs of an individual surgeon or program. Some of the data essential for postoperative risk stratification are only available after the operative note is dictated. A suggested basic synoptic report for patients with thyroid cancer appears in Appendix B of the original guideline document.

#### After Thyroidectomy: The Initial Care Plan

Regardless of who will be providing immediate care and long-term surveillance for patients with thyroid cancer, communication about the operative course is essential. If all caregivers are using a common electronic medical record, such communication is especially easy to do; an example appears in Appendix C of the original guideline document.

Although the management of surgical conditions or complications is often considered the surgeon's responsibility, most multidisciplinary collaborators appreciate knowing the particular or possible complications of thyroidectomy that may bear vigilance. Today there is also an increasing demand to engage the patient in direct perioperative communication. The surgeon's instructions and plan for prophylactic or therapeutic calcium supplementation, wound care, drain management, voice changes, calcitriol use, pending medication changes, pending lab testing including TSH monitoring, return to work, next surgical visit, etc., may be clearly articulated to both the patient and their primary care physicians. In addition, the pathology report is of course a key element in the staging process. For a patient with thyroid cancer on final histology, the letter sent by the surgeon to describe the first postoperative visit can also anticipate the multidisciplinary care plan and the providers involved in care decisions, by providing when possible all available data such as the pathology report and results of molecular marker testing if available.

Particularly in the care of patients with thyroid carcinoma, optimal perioperative communication is a two-way street. Multidisciplinary communication concerning the patient's preoperative conditions and diagnoses, postoperative levothyroxine dosing and any subsequent results of adjuvant radioiodine use, the initial estimates of risks of recurrence and disease specific mortality, and the long-term care plan is very appropriate and appreciated information for the operating surgeon to receive from nonsurgical caregivers. Interdisciplinary communication also facilitates patient compliance with surveillance.

#### Conclusions

Accurate communication of the important findings of thyroidectomy is critical to individualized risk stratification as well as to the short-term follow-up issues of thyroid cancer care that are often jointly managed in the postoperative setting. Moreover, true multidisciplinary communication is essential to providing optimal adjuvant care and surveillance. Although defining the roles and responsibilities of thyroid cancer care is beyond the scope of the present article, the ATA Surgical Affairs Committee feels sure all caregivers would agree that careful communication among the individual practitioners of a health-care environment remains of paramount importance—it is then that all practitioners and the patients themselves most benefit.

## Clinical Algorithm(s)

None provided

## Scope

### Disease/Condition(s)

Thyroid cancer

### Guideline Category

Evaluation

Management

Risk Assessment

Treatment

### Clinical Specialty

Endocrinology

Family Practice

Internal Medicine

Nuclear Medicine

Oncology

Otolaryngology

Pathology

Radiology

Surgery

### Intended Users

Physicians

### Guideline Objective(s)

To define a suggested essential perioperative dataset representing the critical information that should be readily available to each member of the multidisciplinary team making treatment and management recommendations for individual thyroid cancer patients

### Target Population

Patients undergoing thyroid cancer surgery

## Interventions and Practices Considered

1. Essential datasets for the preoperative, intraoperative, and immediate postoperative findings and management of patients undergoing surgery for thyroid cancer
2. Essential features of dictated narrative format and a synoptic computer format
3. Interdisciplinary communication with regard to required resection, the final pathology findings, surgical complications, and other factors that may influence risk stratification, adjuvant treatment, and surveillance

## Major Outcomes Considered

- Usefulness, thoroughness and precision of important clinical findings in thyroidectomy report
- Impact of preoperative, intraoperative and postoperative clinical findings on postoperative risk assessment

## Methodology

### Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Searches of Unpublished Data

### Description of Methods Used to Collect/Select the Evidence

Both PubMed and MEDLINE were searched for articles on thyroidectomy reporting, medical transcription sample reports, thyroid surgery report, operative note dictation, and operative synoptic report from 1990 to 2010. A Google search was performed for thyroid operative report and medical transcription report. Each surgical author was asked to provide a representative copy of their own thyroidectomy operative report, their preoperative letter, their operative consent form, their postoperative letter, any intraoperative data sheets or art figures they use, and any perioperative patient education sheets including discharge instructions. Perioperative patient education, clinical management algorithms and patient education sheets were collected from the authors. The American Association of Endocrine Surgeons' website was searched. The 2006 and 2009 American Thyroid Association guidelines for the management of thyroid nodules and thyroid cancer were reviewed. One endocrinologist (not an author) wrote a helpful outline entitled "How Internists and Surgeons Can All Get Along in the 193.244 Sandbox."

### Number of Source Documents

Not stated

### Methods Used to Assess the Quality and Strength of the Evidence

Not stated

### Rating Scheme for the Strength of the Evidence

Not applicable

### Methods Used to Analyze the Evidence

Review

## Description of the Methods Used to Analyze the Evidence

To identify and agree upon a multidisciplinary set of critical perioperative findings requiring communication, the American Thyroid Association (ATA) Surgical Affairs Committee examined diverse best-practice documents relating to thyroidectomy and extracted common features felt to enhance precise, direct communication with nonsurgical caregivers.

## Methods Used to Formulate the Recommendations

Expert Consensus

Informal Consensus

## Description of Methods Used to Formulate the Recommendations

The American Thyroid Association (ATA) Surgical Affairs Committee reviewed the 2009 ATA guidelines to construct a basic perioperative dataset of factors necessary for accurate risk stratification after surgery for thyroid cancer. The ATA Surgical Affairs Committee agreed upon a set of critical intraoperative findings requiring communication to nonsurgical caregivers and tested these datasets by reviewing diverse examples of best-practice documents relating to thyroidectomy, including office notes, referral letters, operative consents, operative reports, operative diagrams and artwork, and pre- and postoperative patient educational materials, including the extensive patient education website of the American Association of Endocrine Surgeons. The Committee then extracted the essential common denominator features felt to enhance precise and direct communication. In this guideline, the Committee presents basic recommended datasets along with further suggestions to enhance the mutual prospective communication of well-defined care plans for management and cancer surveillance of patients after thyroidectomy.

## Rating Scheme for the Strength of the Recommendations

Not applicable

## Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

## Method of Guideline Validation

Internal Peer Review

## Description of Method of Guideline Validation

The final document was approved by the American Thyroid Association (ATA) Board of Directors and officially endorsed by the American Association of Endocrine Surgeons (AAES), the American Academy of Otolaryngology—Head and Neck Surgery (AAO-HNS), and the American Head and Neck Society (AHNS).

## Evidence Supporting the Recommendations

### Type of Evidence Supporting the Recommendations

The type of evidence supporting the recommendations is not specifically stated.

## Benefits/Harms of Implementing the Guideline Recommendations

## Potential Benefits

- Accurate communication of the important findings and sequelae of thyroidectomy for cancer
- Improved individualized risk stratification
- Improved interdisciplinary approach to surgical management, adjuvant care, and surveillance
- Standardized content and quality of information among the thyroid cancer team

## Potential Harms

Not stated

## Implementation of the Guideline

### Description of Implementation Strategy

An implementation strategy was not provided.

### Implementation Tools

Chart Documentation/Checklists/Forms

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

## Institute of Medicine (IOM) National Healthcare Quality Report Categories

### IOM Care Need

Getting Better

Living with Illness

### IOM Domain

Effectiveness

Patient-centeredness

## Identifying Information and Availability

### Bibliographic Source(s)

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[PubMed](#)

## Adaptation

Not applicable: the guideline was not adapted from another source.

## Date Released

2012 Apr

## Guideline Developer(s)

American Thyroid Association - Professional Association

## Source(s) of Funding

American Thyroid Association

## Guideline Committee

Surgical Affairs Committee

## Composition of Group That Authored the Guideline

*Authors:* Sally E. Carty, Division of Endocrine Surgery, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania; Gerard M. Doherty, Department of Surgery, Boston University School of Medicine, Boston, Massachusetts; William B. Inabnet III, Department of Surgery, Mount Sinai Medical Center, New York, New York; Janice L. Pasieka, Department of Surgery, University of Calgary, Calgary, Canada; Gregory W. Randolph, Department of Otolaryngology, Massachusetts Eye and Ear Infirmary, Boston, Massachusetts; Ashok R. Shaha, Department of Surgery, Memorial Sloan-Kettering Cancer Center, New York, New York; David J. Terris, Department of Otolaryngology, Georgia Health Sciences University, Augusta, Georgia; Ralph P. Tufano, Department of Otolaryngology/Head and Neck Surgery, Johns Hopkins University School of Medicine, Baltimore, Maryland; R. Michael Tuttle, Department of Endocrinology, Memorial Sloan-Kettering Cancer Center, New York, New York

## Financial Disclosures/Conflicts of Interest

W.B.I. and R.M.T. are consultants for Genzyme. For all other authors, no competing financial interests exist.

## Guideline Endorser(s)

American Academy of Otolaryngology - Head and Neck Surgery - Medical Specialty Society

American Association of Endocrine Surgeons - Medical Specialty Society

American Head and Neck Society - Professional Association

## Guideline Status

This is the current release of the guideline.

## Guideline Availability

Electronic copies: Available in Portable Document Format (PDF) from the [Thyroid Journal Web site](#) .



## Availability of Companion Documents

A sample narrative operative report for total thyroidectomy and electronic template for day-of-thyroidectomy letter to referring provider(s) are available in the appendices to the [original guideline document](#) .

## Patient Resources

None available

## NGC Status

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